

Fig. 1

2/5

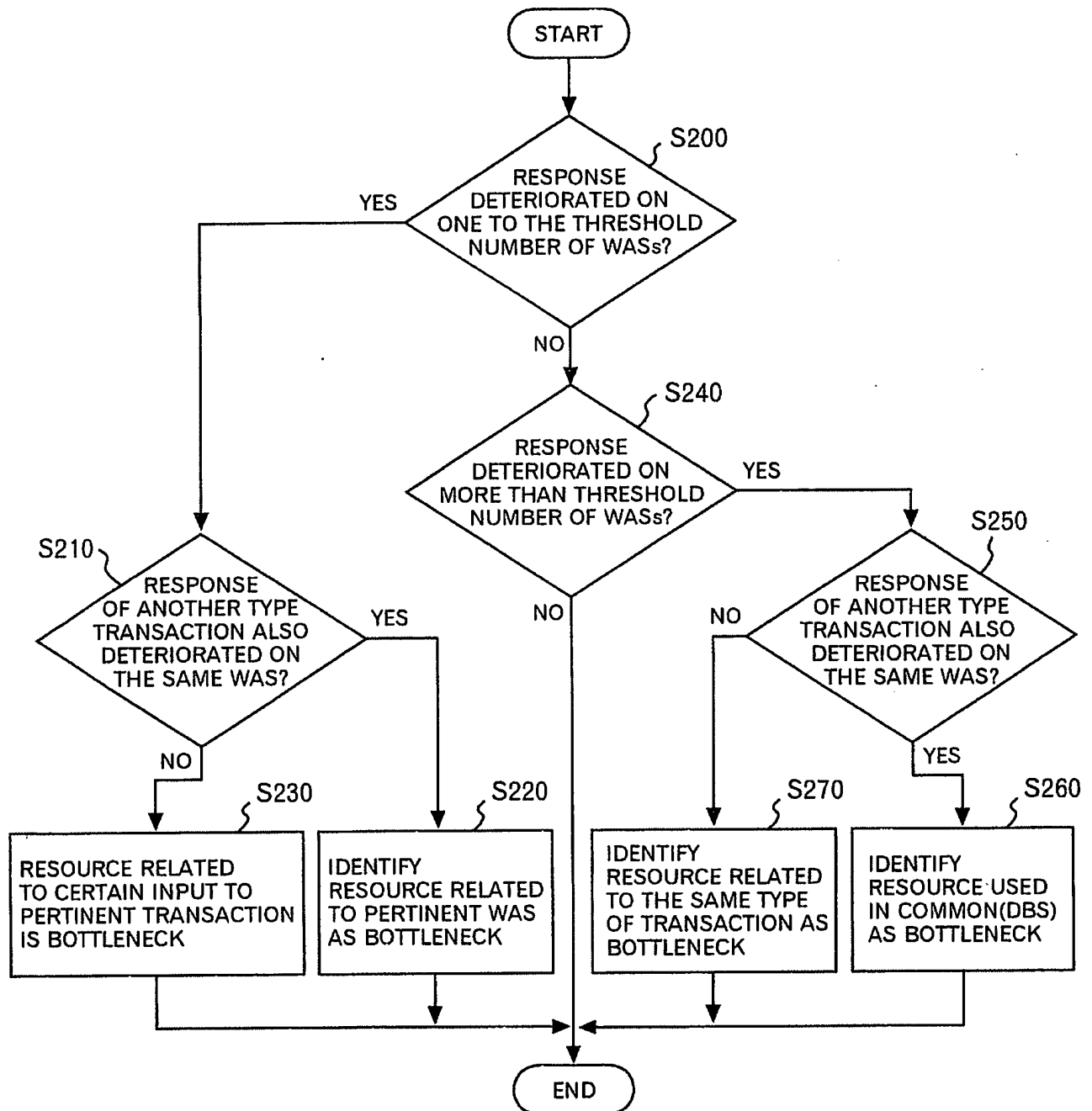


Fig. 2

TYPE OF LOCATION OF BOTTLENECK	RESOURCE	DETECTION CONDITION	DETERMINATION CONDITION	CANCEL CONDITION
RESOURCE USED IN COMMON (DBS)	PROCESSOR	USAGE RATE IS EQUAL TO OR MORE THAN $x\%$ PER n SECONDS ON AVERAGE	CONTINUES m TIMES	NOT DETECTED f TIMES
	DISK (DB, LOG OR OTHERS)	USAGE RATE IS EQUAL TO OR MORE THAN $x\%$ PER n SECONDS ON AVERAGE	CONTINUES m TIMES	NOT DETECTED f TIMES
	MEMORY	THE NUMBER OF TIMES FOR PAGING IS EQUAL TO OR MORE THAN x TIMES PER n SECONDS ON AVERAGE	CONTINUES m TIMES	NOT DETECTED f TIMES
	DB BUFFER	BUFFER MISS RATE IS EQUAL TO OR MORE THAN $x\%$ PER n SECONDS ON AVERAGE	CONTINUES m TIMES	NOT DETECTED f TIMES
WAS	PROCESSOR	USAGE RATE IS EQUAL TO OR MORE THAN $x\%$ PER n SECONDS ON AVERAGE	CONTINUES m TIMES	NOT DETECTED f TIMES
	DISK	USAGE RATE IS EQUAL TO OR MORE THAN $x\%$ PER n SECONDS ON AVERAGE	CONTINUES m TIMES	NOT DETECTED f TIMES
	MEMORY	PAGING PERFORMANCE COUNT IS EQUAL TO OR MORE THAN x TIMES PER n SECONDS ON AVERAGE	CONTINUES m TIMES	NOT DETECTED f TIMES
	JVM MEMORY	GC IS TO BE PERFORMED x TIMES OR MORE PER n SECONDS	CONTINUES m TIMES	NOT DETECTED f TIMES
	DB CONNECTION	MULTIPLICITY REACHES THE UPPER LIMIT	OCCURRENCE TIME	WHEN WAS IS HALTED
	WAS PROCESSOR	DBS PROCESS TIME/PROCESS TIME IS EQUAL TO OR LOWER THAN $x\%$	OCCURRENCE TIME	NO OCCURRENCE FOR n SECONDS
RESOURCE RELATED TO TRANSACTION	DBS PROCESSOR	DBS PROCESS TIME/PROCESS TIME IS EQUAL TO OR LOWER THAN $x\%$. WITHIN n SECONDS, IT IS TO BE DETERMINED THAT DBS PROCESSOR IS A BOTTLENECK	OCCURRENCE TIME	NO OCCURRENCE FOR n SECONDS
	DBS DISK	DBS PROCESS TIME/PROCESS TIME IS EQUAL TO OR LOWER THAN $x\%$. WITHIN n SECONDS, IT IS TO BE DETERMINED DBS DISK IS A BOTTLENECK	OCCURRENCE TIME	NO OCCURRENCE FOR n SECONDS

Fig. 3

4/5

BOTTLENECK	RESOURCE	LOAD CONTROL INFORMATION
RESOURCE USED IN COMMON (DBS)	PROCESSOR	LOAD CONTROL PROCESS 3 → 1 → 4 → 2 → 5 → 6
	DISK (DB)	LOAD CONTROL PROCESS 2 → 1 → 6 → 5
	DISK (LOG)	LOAD CONTROL PROCESS 1 → 2 → 5 → 6
	DISK (OTHER)	LOAD CONTROL PROCESS 1 → 5
	MEMORY	LOAD CONTROL PROCESS 1 → 5
	DB BUFFER	LOAD CONTROL PROCESS 1 → 5
WAS	PROCESSOR	LOAD CONTROL PROCESS 3 → 1 → 5
	DISK	LOAD CONTROL PROCESS 1 → 5
	MEMORY	LOAD CONTROL PROCESS 1 → 5
	JVM MEMORY	LOAD CONTROL PROCESS 1 → 5
	DB CONNECTION	LOAD CONTROL PROCESS 1 → 5
RESOURCE RELATED TO TRANSACTION	WAS PROCESSOR	LOAD CONTROL PROCESS 5
	DBS PROCESSOR	LOAD CONTROL PROCESS 5 → 6
	DBS DISK	LOAD CONTROL PROCESS 5 → 6

Fig. 4

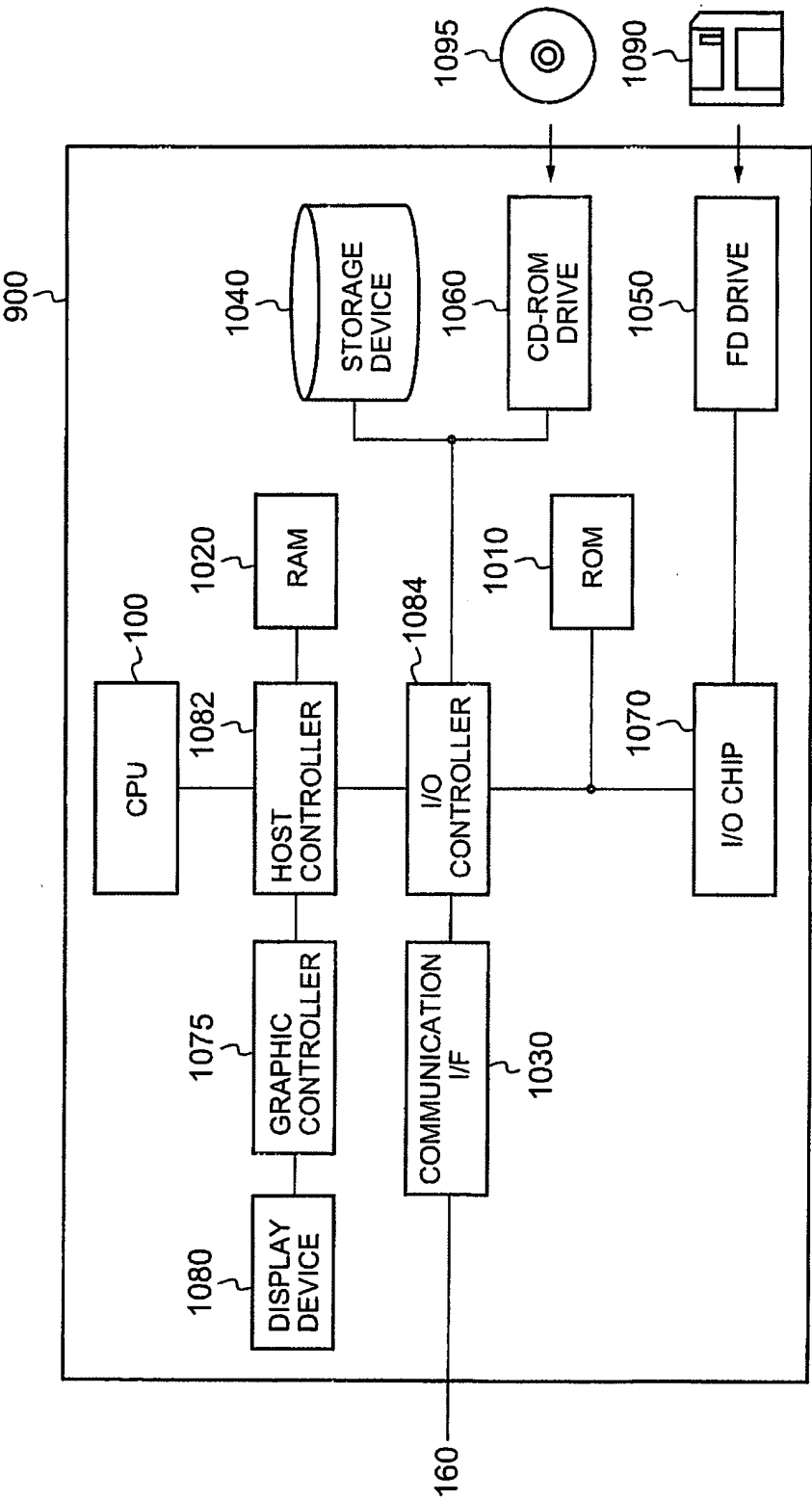


Fig. 5